

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Currently Amended) A computer program product readable by a computing system and encoding a computer program of instructions, the computer program product comprising:
 - a hardware protected region storing a portion of a computer basic/~~input~~ input/output system comprising:
 - a compressed computer program operative to restore a portion of the computer basic input/output system when uncompressed and executed, and
 - a first uncompressed computer program operative to uncompress the compressed computer program; and
 - a non-protected region storing the remainder of the computer basic input/output system.
2. (Cancelled)
3. (Currently Amended) The computer program product of Claim 2~~1~~, wherein the uncompressed computer program is operative to uncompress the compressed computer program in response to determining that a portion of the basic input/output system stored within the non-protected region is invalid.
- ~~3.4.~~ (Currently Amended) The computer program product of Claim-~~2~~ 3, wherein the portion of the computer basic input/output system stored within the hardware protected region further comprises:
 - ~~an~~ a second uncompressed computer program for detecting and initializing one or more random access memory devices within the computing system.

4.5. (Currently Amended) The computer program product of Claim-~~3~~4, wherein restoring the portion of the computer basic input/output system stored in the non-protected region comprises replacing the portion of the computer basic input/output system stored in the non-protected region with a computer basic input/output system stored on a mass storage device.

~~5.6.~~ (Currently Amended) A method for utilizing compressed program code stored in a hardware protected region of a memory device of a computing system, the method comprising:

storing within the hardware protected region a portion of a computer basic input/output system comprising a recovery computer program operative to restore a portion of the computer basic input/output system when uncompressed and executed, the recovery computer program being stored in a compressed format;
storing within the hardware protected region an decompression computer program operative to uncompress a compressed computer program when executed, the decompression computer program being stored in an uncompressed format; and
storing within the hardware protected region a memory initialization computer program for detecting and initializing one or more random access memory devices within the computing system, the memory initialization computer program stored in an uncompressed format.

~~6.7.~~ (Currently Amended) The method of Claim-~~5~~6, further comprising:

upon an initial program load of the computing system, executing the memory initialization computer program to detect and initialize one or more random access memory devices within the computing system; and
copying the decompression computer program to a memory area provided by the one or more random access memory devices.

~~7.8.~~ (Currently Amended) The method of Claim-~~6~~7, further comprising:

executing the decompression computer program to decompress the recovery computer program to a memory area provided by the one or more random access memory devices.

~~8.9.~~ (Currently Amended) The method of Claim-~~7~~8, further comprising:

storing within a non-hardware protected region of the memory device a second portion of the computer basic input/output system, the second portion of the computer basic input/output system stored in a compressed format; and
executing the recovery program from the memory area to determine whether the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is valid.

~~9.10.~~ (Currently Amended) The method of Claim-~~8~~9, further comprising:

in response to determining that the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is valid, executing the decompression computer program to decompress the portion of the basic input/output system stored in the non-hardware protected region to a memory area provided by the one or more random access memory devices; and
executing the uncompressed portion of the basic input/output system stored in the non-hardware protected region from the memory area.

~~10.11.~~ (Currently Amended) The method of Claim-~~8~~9, further comprising:

in response to determining that the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is invalid, executing the recovery computer program from the memory area to restore the portion of the computer basic input/output system stored in the non-hardware protected region.

~~11.12.~~ (Currently Amended) A computer-readable media comprising computer-executable instructions which, when executed by a computer, cause the computer to perform the method of Claim-~~5~~6.

~~12.13.~~ (Currently Amended) A computer-controlled apparatus operative to perform the method of Claim-~~5~~6.

~~13.~~14. (Currently Amended) A method for utilizing compressed program code stored in a hardware protected region of a memory device of a computing system, the method comprising:

generating a first executable computer program code segment, the first executable computer program code segment operative to determine whether a portion of a computer basic input/output system stored in a non-hardware protected region of the memory device is valid;

compressing the first executable computer program code segment;

converting the compressed first executable computer program code segment to a raw data format;

generating a second executable computer program code segment, the second executable program code segment operative to uncompress the compressed first executable computer program code segment;

converting the second executable computer program code segment to a raw data format;

generating a third executable computer program code segment, the third executable computer program code segment including the converted raw data for the first executable code segment and the converted raw data for the second executable program code segment; and

storing the third executable computer program code segment in the hardware protected region of the memory device.

- ~~14.15.~~ (Currently Amended) The method of Claim-~~13~~ 14, further comprising:
executing the third executable computer program code segment from the memory device, including copying the second executable computer program segment from the third executable computer program code segment to one or more random access memory devices of the computing system; and
executing the second executable computer program segment to decompress the first executable computer program code segment from the third executable program code segment to a memory area provided by the one or more random access memory devices.
- ~~15.16.~~ (Currently Amended) The method of Claim-~~14~~ 15, further comprising:
executing the first executable program code segment from the memory area to determine whether a the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is valid.
- ~~16.17.~~ (Currently Amended) The method of Claim-~~15~~ 16, further comprising:
in response to determining that the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is valid,
executing the second executable program code segment to decompress the portion of the basic input/output system stored in the non-hardware protected region to a memory area provided by the one or more random access memory devices; and
executing the uncompressed portion of the basic input/output system stored in the non-hardware protected region from the memory area.
- ~~17.18.~~ (Currently Amended) The method of Claim-~~15~~ 16, further comprising:
in response to determining that the portion of the computer basic input/output system stored in the non-hardware protected region of the memory device is invalid,
executing the second executable program code segment from the memory area to restore the portion of the computer basic input/output system stored in the non-hardware protected region.

- ~~18~~19. (Currently Amended) The method of Claim ~~17~~ 18, further comprising:
executing the second executable program code segment to decompress the restored
portion of the basic input/output system stored in the non-hardware protected
region to a memory area provided by the one or more random access memory
devices; and
executing the uncompressed portion of the basic input/output system stored in the
non-hardware protected region from the memory area
- ~~19~~20. (Currently Amended) A computer-readable media comprising computer-
executable instructions which, when executed by a computer, cause the computer to
perform the method of Claim ~~13~~ 14.
- ~~20~~21. (Currently Amended) A computer-controlled apparatus operative to perform the
method of Claim ~~13~~ 14.